

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A filter unit for filtering aquarium water through three stages of filtration, including mechanical filtration, chemical filtration and biological filtration, the filter unit comprising:

a packet having porous filter walls with peripheral edges including longitudinally extending side edges and laterally extending end edges, the filter walls being juxtaposed with one another and configured for mechanical filtration of aquarium water passed in a generally transverse direction through the filter walls;

a filter medium interposed between the porous filter walls, the filter medium being configured for chemical filtration of aquarium water passed through the filter walls in the generally transverse direction;

a block of reticular material for juxtaposition with the packet in a location wherein aquarium water passed through the filter walls of the packet in the generally transverse direction will be intercepted by the block of reticular material, the block of reticular material being configured for biological filtration of the aquarium water passed through the block; and

a frame for securing the packet and the block in juxtaposition with one another in an integrated unit, the frame having

transversely opposed frame members including openings distributed longitudinally and laterally throughout the frame members for passing the aquarium water through the frame members to enter and exit the filter unit along the generally transverse direction.

2. The filter unit of claim 1 wherein the frame members are latched together for selective removal and replacement of the packet and the block, independent of one another.

3. The filter unit of claim 2 wherein the frame members are hinged together for selective opening and closing.

4. The filter unit of claim 3 wherein the frame is molded of a synthetic polymeric material in a unitary construction wherein the frame members are hinged together at a living hinge.

5. The filter unit of claim 1 wherein the filter medium comprises granules of filter medium.

6. The filter unit of claim 5 wherein the granules comprise activated carbon.

7. The filter unit of claim 5 wherein the packet includes a plurality of cells distributed at least longitudinally along the

packet for maintaining the filter medium distributed longitudinally along the packet.

8. The filter unit of claim 7 wherein the granules comprise activated carbon.

9. The filter unit of claim 1 wherein the block is seated within the frame contiguous with the packet.

10. The filter unit of claim 1 wherein the frame includes side rails extending longitudinally along laterally opposite sides of the frame for selective engagement with generally complementary grooves in an aquarium filtration system in which aquarium water is circulated through the filter unit when the filter unit is placed in the aquarium filtration system.

11. The filter unit of claim 1 wherein the packet includes side flanges extending along the side edges of the packet, and the frame members include a gripping configuration along laterally opposite sides of the frame for gripping corresponding side flanges of the packet to secure the side edges of the packet in place within the frame while aquarium water is passed through the packet.

12. The filter unit of claim 11 wherein the gripping configuration includes gripping teeth arranged for engaging the side flanges of the packet.

13. The filter unit of claim 11 wherein the packet includes end flanges extending along the end edges of the packet, and the frame members include a gripping configuration along longitudinally opposite ends of the frame for gripping corresponding end flanges of the packet to secure the end edges of the packet in place within the frame while aquarium water is passed through the packet.

14. The filter unit of claim 13 wherein the gripping configuration includes gripping teeth arranged for engaging the end flanges of the packet.

15. The filter unit of claim 1 wherein the packet includes a peripheral flange extending along the peripheral edges of the packet, and the frame members include a gripping configuration along peripheral portions of the frame members for gripping corresponding portions of the peripheral flange of the packet to secure the portions of the peripheral flange of the packet in place within the frame while aquarium water is passed through the packet.

16. The filter unit of claim 15 wherein the gripping configuration includes gripping teeth arranged for engaging the corresponding portions of the peripheral flange of the packet.

17. A method for filtering aquarium water through three stages of filtration, including mechanical filtration, chemical filtration and biological filtration, the method comprising:

selectively securing within a frame

a packet having porous filter walls juxtaposed with one another and configured for mechanical filtration of aquarium water passed through the porous filter walls, and a filter medium interposed between the porous filter walls, the filter medium being configured for chemical filtration of aquarium water passed through the filter walls and the filter medium; and

a block of reticular material in juxtaposition with the packet in a location wherein aquarium water passed through the filter walls of the packet will be intercepted by the block of reticular material, the block of reticular material being configured for biological filtration of the aquarium water passed through the block;

inserting the frame into an aquarium water filtration system;

filtering aquarium water through the packet and the block;

removing the frame from the filtration system;

selectively removing the packet from the frame when the packet no longer serves effectively to mechanically filter aquarium water;

replacing the removed packet with a fresh packet, and securing the fresh packet in the frame; and

replacing the frame, with the fresh packet secured therein, in the filtration system.

18. The method of claim 17 including selectively removing the block from the frame when the block no longer serves effectively to biologically filter aquarium water, subsequent to removing the frame from the filtration system, replacing the removed block with a fresh block, and securing the fresh block in the frame, prior to replacing the frame in the filtration system.

19. A method for filtering aquarium water through three stages of filtration, including mechanical filtration, chemical filtration and biological filtration, the method comprising:

selectively securing within a frame

a packet having porous filter walls juxtaposed with one another and configured for mechanical filtration of aquarium water passed through the porous filter walls, and a filter medium interposed between the porous filter walls, the filter medium being configured for chemical filtration of aquarium water passed through the filter walls and the filter medium; and

a block of reticular material in juxtaposition with the packet in a location wherein aquarium water passed through the filter walls of the packet will be intercepted by the block of reticular material, the block of reticular material being configured for biological filtration of the aquarium water passed through the block;

inserting the frame into an aquarium water filtration system;

filtering aquarium water through the packet and the block;

removing the frame from the filtration system;

selectively removing the block from the frame when the block no longer serves effectively to biologically filter aquarium water;

replacing the removed block with a fresh block, and securing the fresh block in the frame; and

replacing the frame, with the fresh block secured therein, in the filtration system.